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ABSTRACT

This study examines the question of whether a college education meets society's expectations in today's world. Assessment programs are being used by academia to determine a college student's achievements and whether his or her performance will enable him or her to be effective in the real world. Assessment, however, is under fire by those who have different ideas about testing and about what standards to use. One popular assessment, the pre-testing and post-testing, used by some colleges has been shown to be helpful in gathering information on what students are learning. There are also several alternative assessment tests that are used by others in the academic arena. Commercially designed examinations are employed to measure general knowledge. Locally designed examinations allow for local autonomy. Portfolios promote interactive learning and a way for students to see improvement in areas where they need to improve. Theses and projects are still another form of assessment along with oral examinations. Contains 14 references. (JAG)

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ASSESSMENT AND THE POLITICAL SCIENCE MAJOR: THE MOVEMENT AFOOT

Nancy S. Lind
Illinois State University
American Political Science Association Convention
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THE MOVE TOWARDS ASSESSMENT

Each year a large percentage of high school graduates in the United States continue their education by matriculating at a college or university. As American society and employers have gradually increased the emphasis on obtaining a college degree, the young and not-so-young have looked to higher education as the key to the golden door of success. Recently, however, more and more people are asking the question, "Does college make a difference?" With education being increasingly scrutinized, society is asking to see evidence of what students actually learn in college. This demand for accountability has resulted in an assessment movement that seeks to provide evidence regarding college's impact on students.

The rising cost of a college education coupled with the public perception that college graduates lack fundamental academic capabilities (Warren, 1987) has led to a push for academic accountability. Halpern's (1987) list of agents pressuring for accountability includes taxpayers, state legislators, accrediting agencies, national task forces, and private industry. Each of these constituencies are seeking 'proof' of the value of a college education.

During the last decade, the United States has appeared to complete a momentous explosion of its higher educational system. That explosion was sustained over nearly three decades, between 1954 and 1983 (Resnick, 1987) but slammed to a rather abrupt halt in the 1990s. Additionally, four year colleges and universities have been challenged by an increasing growth of community colleges, institutions often with a far different mission than traditional undergraduate institutions. Consequently more and more students are graduating with college degrees albeit often stopping at the associate degree level. Nonetheless the general public and state legislatures often categorize all of higher education as one entity. Such a grouping thus brings charges

that higher education is not producing the same caliber of students as it did in the past. Large segments of the public have little confidence in the quality and effectiveness of higher education (Resnick, 1987). This too has been bolstered by critiques from academia. Former Secretary of Education William Bennett's call to show the public that higher education institutions do make a valued different in the education and growth of students did little to assure the public that all was okay in the ivory tower (Resnick, 1987). Similarly, governors have called on universities and colleges to demonstrate their contributions to more efficient and comprehensive learning. State legislatures are refusing to maintain funding for state universities without some demonstrable proof that higher education is making a difference and that current subsidies are being used effectively and efficiently (Resnick, 1987). Resnick and Goulden (1987: 77) point out that the resulting emphasis upon assessment is predictable as a "goal of restoring coherence and substance to the undergraduate program."

The present situation in higher education is not yet a crisis, but the problems are real and persistent. The problems will undoubtedly receive increasing attention in the years ahead. Higher education is under fire and officials at all levels of government warn of the need for greater scrutiny. Major interest groups have issued reports that decry the quality of higher education and urge immediate reforms (Belcher, 1987). At the heart of these issues are questions of what is excellence in higher education and how can it be measured.

Astin (1985) answered the questions with a statement that set much of higher education on fire. He argued that excellence in education should be measured with a value-added approach which focused on changes in students from the beginning of their collegiate career to the end (Belcher, 1987). Value-added, he argued, was the true measure of education as it reflected an

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institution's ability to "make a positive difference" in the lives of students (Astin, 1984: 27). His was an idea which gained momentum quickly; state coordinating boards in Tennessee and South Dakota adopted the approach almost immediately (Belcher, 1987) and other boards later followed suit. Other states, and individual institutions, argued that the fire was spreading too quickly and more thought needed to be given to the concept. What, after all, is value-added and how could it be measured?

Critics of value-added assessment indicated that focusing on improvements was an insufficient basis for claiming that institutions had made a positive contribution to individual students' lives. These people argued for minimal standards that should be met by all students before positive contributions can be claimed. Even if everyone agrees that it is important to measure improvement, Belcher (1987) explains that it can be difficult to do so. Measurement specialists have spent years grappling with means of measuring and comparing gains. Additionally, another measurement issue involves whether to measure the same students at the beginning and the end of their collegiate careers (Turnbull, 1987) or whether the use of cohort groups is sufficient. Turnbull (1987) indicates that utilizing the average increases of cohort groups may more fully explain an institution's retention policy than the quality of education provided by the institution (Belcher, 1987).

Critics of value-added have also expressed fear that value-added testing will lead to uniform curricula and that institutional autonomy will be lost. Astin and Ewell (1985) counter that a value-added perspective merely forces faculty to state objectives for their majors and to become more explicit about the skills and knowledge bases they want all of their majors to possess. Further, Warren (1984) believes that much value-added testing is trivial as it focuses too heavily on pre- and posttesting of curricular content. He argues

that it is easy to construct a test where later year students will score higher than first year students and to claim, then, that the higher performance is an adequate indicator of the effects of collegiate learning.

Proponents of value-added assessment, on the other hand, argue that pre- and posttests are but one technique for measuring value-added. Turnbull (1987) urges institutions to adopt a variety of assessment techniques to measure student progress. He states that "both progress and the end product are important in assessing the value of education" (Belcher, 1987). Assessment, he adds, is most useful when it is used to compare the effectiveness of programs from year to year.

Perhaps the largest drawback to value-added assessment, however, is the reluctance of faculty to agree on a core knowledge they wish all of their graduates to possess. Faculty frequently argue that there are so many subfields within individual majors that it is impossible to agree on even a limited set of core objectives (Fong, 1988). Without a determination to define the rationale, objectives and content of the major, assessment cannot proceed. As Fong (1988: 73) states, "validity in assessment depends on the correspondence between what is tested and the body of knowledge and skills deemed important to be assessed. If faculty are not able to enunciate what they seek in a graduate in the major, they will not be in a good position to determine the appropriateness of an instrument, since they cannot specify what they seek to measure".

The consequence of these complaints levelled against higher education and the debates over the nature of value-added assessment have led to the conclusion that American higher education appears to be poised on the edge of a revolution (Courts and McInerney, 1993). The educational revolution Courts and McInerney (1993: xiv) refer to entails the buzzwords of "performance-based education", "outcomes", "value-added teaching", "state-imposed mandates",

"accountability", "portfolios"...and depending on one's understanding and acceptance of the concepts, this "revolution may be symbolized by either a guillotine threatening any and all who choose to dispute the sense of imposed assessment mandates;...or a new educational constitution that details the rights and responsibilities of teachers and learners".

Many states have already begun to explores avenues of change in their higher education systems to combat these increasing criticisms, and their work has begun to suggest that positive changes can and do result. The momentum for assessment in higher education often begins with a mandate. In 1986 the National Governor's Association called for the implementation of assessment programs (Courts and McInerney, 1993). Governor John Ashcroft of Missouri stated, "The pulic has a right to know and understand the quality of undergraduate education that young people receive from publicly funded colleges..." (Hutchings and Marchese, 1990: 16) The federal government has added its support to assessment with National Education Goal 5.5 which states that "by the year 2000, every adult American will be literate and will possess the knowledge and skills to compete in a global economy and exercise the rights and responsibilities of citizenship" (Courts and McInerney, 1993: xv). Additional pressure comes from the federal government as accrediting agencies face U.S. Department of Education rules that stipulate that "they, as a condition of their own approval, must require information about learning outcomes" (Hutchings and Marchese, 1990). Assessment is considered a tool for diagnosing and correcting problems in the education system, then, and is not an end in itself. Assessment is a tool for improving instruction and improving the quality of education received by the nation's students.

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ALTERNATIVE METHODS OF ASSESSMENT

It is clear that assessment is a 'hot' topic in the circles of higher education. Courts and McInerney (1993: 1) state that "no country is as committed to ongoing testing, measuring, and assessment of its students as is the United States." It is perfectly reasonable for the state and federal governments to ask academia to be accountable. Where consensus is missing, however, is with regard to which assessment tools work best. In the following discussion, we intend to examine and explain the range of assessment tools currently available. For assessment to be successful, faculty need to know about assessment, potential pitfalls, and ways of avoiding such pitfalls before engaging in their own assessment projects. This means, however, "that faculty cannot contemptuously dismiss calls for accountability and, at the same time, complain about imposed systems of assessment" (Courts and McInerney, 1993: 18).

The first and perhaps most important question to address is where the assessment process should occur. Should it be a measure of all of a collegiate education, a measure of a general education program, or a measure of an individual major? While rationale can be provided for each of these alternatives, study in the major field is the centerpiece of a baccalaureate degree. While educators stress the importance of liberal learning and cocurricular experiences, "the focal point of the college experience remains study in depth, guided most commonly by concentration requirements within an academic department (Fong, 1988: 71). Methods for assessing cumulative discipline-specific learning have two main objectives: to gauge individual student achievement or to measure the performance of majors as a group (Fong, 1988: 72). In turn, the results may serve any of three purposes: to select individuals for graduate study; to certify minimum levels of basic competency, perhaps to meet accountability standards of external review boards; or to

provide information for program review (Fong, 1988). It is important, then, to be clear about what is desired in a particular assessment and to use the assessment tools most appropriate for these goals.

It logically follows that the selection of an assessment method is based primarily on a method's direct effects, the ways in which its results will be interpreted and used both internally by the institution and externally by accrediting bodies. Results may affect enrollment, hiring and curriculum requirements and offerings to name but a few consequences of assessment. Devising an approach to evaluate achievement in the major demands attention to the objectives, purposes and effects of the approach.

Assessing a major program engages the faculty in the debate over what their major actually means. For assessment to measure student achievement, faculty need to agree on what they expect their students to achieve. Without a determination to define the rationale and content of the major, assessment simply cannot proceed. "Validity in assessment depends on the correspondence between what is tested and the body of knowledge and skills deemed important to be assessed" (Fong, 1988: 73). If faculty are unable to agree on what they seek in a graduate in their major, they cannot assess the appropriateness of the available instruments since they cannot specify what they seek to measure. Politically, this is where attempts to assess the major struggle. The very presumption that there can be an identifiable core of knowledge for a major often becomes a point of dispute. The goals of the major can be described in a number of ways, from a designation of content to an enumeration of proficiencies, but a determination as to the goals of each department must ensue. The agreement may be local rather than national, a reflection of the particular priorities of the individual department (Fong, 1988: 74) and it will likely change over time, but it must occur. Assessment of the major thus

entails far more than the choice of an appropriate instrument; it requires consideration and ensuing discussion of the objective, purpose and effects of the major. These contexts must be kept in mind when the assessment instruments are selected and it is important, in the preservation of departmental autonomy, that faculty maintain local control of assessment (Courts and McInerney, 1993: 18). Regardless of where the mandate originates, the potential validity and success of assessment relies on the extent to which the faculty "own" the process. An examination of currently available assessment tools follows.

Commercially Designed Examinations

Commercially available examinations are readily available and have been adopted by numerous institutions in their assessment efforts. Testing agencies such as the Educational Testing Service provide a range of standardized tests of general knowledge and skills as well as discipline specific knowledge. The Educational Testing Service provides the ACT and SAT examinations, the CLEP (College Level Examination Program), the GRE (Graduate Record Examination) and a new test designed specifically for assessment purposes, the Major Field Achievement Test (Nichols, 1991). While these examinations have the advantage of being field-tested and allow for a comparison to a national norm group, a commercial test may not reflect what a particular department is trying to accomplish. Various and significant problems are associated with such tests. For example, standardized tests created by testing agencies cannot directly engage the content of individual curricula. Further, they suffer from the biases inherent in all standardized nationally normed tests: "they measure a student's ability to take a given exam and little more" (Courts and McInerney, 1993: 21). Often such exams are used, however, since they make few demands on faculty time and they happen to be easily administered and scored.

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Locally Designed Examinations

The advantage of locally designed examinations is that they can and do reflect local autonomy. Every major can develop its own examination and each of these examinations can be tailored to measure what each department is trying to have its students accomplish. That is, different philosophical approaches can be assessed for different departments which allows each department to preserve its approach to the discipline. A locally designed examination allows a thorough diagnostic coverage of local goals and content. Controlled by local faculty, these methods remain sensitive to local educational objectives, goals and missions. Furthermore, as Fong (1988) notes, faculty are involved in both instruction and assessment.

However, involvement in assessment takes time and resources to develop. If faculty are not fully involved in the process, the usefulness of the process will undoubtedly suffer as cynics of the process will claim that it was not sufficiently connected to the goals of their program. An additional problem with locally designed examinations is that inter-institutional comparability may be lost. If each department in a major uses its own instrument, making comparisons across programs becomes difficult, if not impossible. If the goal of assessment, though, is program improvement more than program comparison, such an approach may be the best choice.

Portfolio Methods

In a portfolio method students are required over several years to assemble papers and examinations attesting to their mastery of the major. The purpose of portfolio assessment is to help students become integral partners in their learning process by having them become interactive partners with their professors in shaping the learning process (Courts and McInerney, 1993: 86).

It is expected that faculty and students alike will consult the portfolio on a regular basis and use the items in the portfolio to improve the students' learning. There are two primary types of portfolios: nonselective and selective. The nonselective portfolio collects all of a student's work in a major during their collegiate career and chronologically dates and labels all work. The major advantage of a nonselective portfolio is that both the student and professor have access to all of the student's work and therefore both have an opportunity to gain a complete perspective on the student's growth. If there are specific weaknesses that are consistent throughout the portfolio, there is evidence as to what aspects of the learning process need to be more fully developed for that specific student. From the programmatic perspective, one would be able to see immediately what kinds and how much work is required in the program, how well students perform, and whether or not students improve over time (Courts and McInerney, 1993: 98). Disadvantages are also obvious with the all-inclusive approach. First, the portfolio becomes unwieldly and indeterminate. In short, the complete picture may be so undaunting that it becomes like the blind man and the elephant. There is so much information there that the details are lost. Second, such a portfolio creates a heavy demand on the professor's time. If the professor spends the requisite amount of time on each portfolio necessary to pinpoint individual weaknesses, he will hardly have time left to teach.

Selective portfolios allow students to choose their best work from each year of their collegiate career and to place those papers and examinations in their portfolio. This approach empowers students by encouraging them to select for themselves the papers they think represent their highest level of achievement each year. This tactic alone may convince even the most reluctant students of the value of assessment. Additionally, the time demands placed on

individual students to assemble the portfolio and individual faculty to assess the portfolio are reduced considerably.

Senior Theses and Projects

Several colleges require a capstone experience for all of their majors. In the capstone experience one of the common requirements is a senior thesis or project. Bradford College, for example, requires all majors to pose a significant question and, with the assistance of a faculty advisor, work through that question to a solution and produce a senior thesis as the result (Fong, 1988: 78). The rationale behind this approach is that the student must apply skills and knowledge gained over their collegiate career and show evidence of being an independent thinker. The thesis is expected to allow students to demonstrate an individual synthesis of their major.

A major concern with senior theses and projects is that since each project is unique, there is little comparability between students. This approach thus fails when it comes to revealing common learning for all students. Additionally, since a thesis or project is usually an investigation of a narrow topic within the discipline, the results will show little evidence of a student's breadth of knowledge. A final concern deals with evaluation. Unless the project is evaluated by someone other than the advisor, it may represent nothing more than an additional course (Fong, 1988: 79).

Oral Examinations

Often supplemental to a thesis, some colleges require oral examinations of all graduating majors. The examination usually uses a senior thesis or project as a point of departure but then relates the work to the larger context of the major. The oral examination is frequently conducted by a board of examiners

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consisting of representatives from the department as well as outside examiners. One advantage of this approach has been to allow departments to showcase the talents of their students to members outside of their department. King College in Tennessee, for example, found that using outside members sometimes led to the offer of jobs or fellowships for their students. This outcome was especially pronounced when visiting scholars or knowledgeable members of the community were used on the examining boards. The drawback has been that it is difficult to use orals alone to test for common learning across all majors. There is also the problem of more nervous students or less voluble students suffering in comparison to others. (Fong, 1988: 79)

As evidence above suggests, there are many approaches to assessment and each has its own inherent strengths and weaknesses. Each department, however, can select the approach or approaches that work best for measuring the goals they seek for their students and certainly, departments are free to experiment and change the approaches they utilize. In fact, for assessment to be effective, the assessment instrument is likely to be in constant flux.

THE ASSESSMENT EXPERIENCE OF ONE DEPARTMENT: ILLINOIS STATE UNIVERSITY'S DEPARTMENT OF POLITICAL SCIENCE

At the outset the assessment process required the Department of Political Science to determine a core set of objectives desired for all students. After several lengthy meetings of the faculty it was clear that consensus was going to be impossible. Thus, to proceed with the assessment effort, a committee was established to collectively decide on this core set of objectives. The committee was representative of each of the subfields within the discipline. After several committee deliberations, a set of objectives was taken back to the full faculty in the form of a program review. Faculty were allowed and

encouraged to add or subtract from the core goals for the discipline. After receiving feedback from the faculty who chose to respond, it appeared that there were three central goals for the department. The overarching goals included (1) knowledge and comprehension of the discipline; (2) skills; and (3) attitudes. Operationalization of these goals became the responsibility of the departmental assessment coordinator. Trying to keep the goals manageable and measureable, it was decided to operationalize them as follows. The first goal of knowledge and comprehension would be evaluated by whether students were able to recall, recognize and understand the principal events, trends and issues in Western and Non-Western political traditions. The second goal of skills would be evaluated by whether students could examine critically and discuss/explain statements on political matters encountered in their textbooks or in everyday life. Finally, the third goal states that students should be objective in interpreting political events, should be able to find rational explanations for the occurrence of such events, and should respect the right of others to hold different points of view. The measurement of these objectives would occur in a two-fold process. Wherever possible each goal would be measured through the use of a locally developed multiple choice examination supplemented with a locally designed essay question. The second fold of the process would be a variation of the portfolio system which would collect research papers from a sample of first year majors and fourth year majors and would compare the depth and level of analyses of students in these two years.

The objective examination consisted of an equal number of questions from each of the subfields within the discipline: American politics, International relations, Comparative politics, Political theory and methodology, Public policy and administration, and Public law. Each department is free, of course, to conceptualize the discipline with its own interpretation of subfields. The

examination also consisted of one broad essay question which asked students to identify, explain and resolve a significant issue faced by a political system. The question was intentionally phrased in such a broad fashion to allow students to answer it from the perspective of the subfield where they believed they held the greatest strength.

The questions which were utilized on the examination were designed specifically to measure the following objectives: (1) the development of an understanding of the breadth and scope of the Political Science discipline and its subfields; (2) the development of the critical thinking skills as well as the ability to constructively relate the theoretical and applied aspects of the discipline; and (3) the development of written skills within the context of a critical environment. The expectation was that significant differences should exist between freshmen and senior majors on each of the dimensions measured. That is, seniors should score higher on both the multiple choice and essay sections of the examination if the examination indeed measures the aforementioned goals.

The Department of Political Science first ran a pilot test in the summer of 1992 with an introductory level American government class and a senior level Political philosophy class. The results of this exam led to a massive rewriting of the original assessment instrument as the exam had clearly been too easy for all students. It was rare that any differences were found between the two classes and there were few incorrect answers given. The exam was rewritten to produce a higher level of reliability, .69 as compared with .40, and was then given to a sample of freshmen and senior majors in the academic years 1992-93, 1993-94, and 1994-95. Freshmen were enrolled in their first political science course when they took the examination while seniors had completed over eighty percent of their major requirements but who might still

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need to take a few additional courses in the major. Seniors generally took the examination the first semester of their senior year.

The results of the examination in each of the years showed a difference in mean scores for freshmen and senior majors but the gains were not as great as the department would like them to be. The total number of points for each section, multiple choice and essay, was 37 points. Table 1 shows the results.

TABLE 1: Examination Mean Scores For Freshmen and Senior POS Majors

	1992-93	1993-94	1994-95
Freshmen multiple choice mean	14.8	15.6	14.3
Seniors multiple choice mean	21.1	21.3	19.9
Freshmen essay mean	19.3	18.7	14.4
Seniors essay mean	27.3	24.0	23.0

The multiple choice section of the examination was computer scored whereas the essay section was blindly graded by faculty in the department. Only the assessment coordinator knew which students were freshmen and which were seniors and all faculty were allowed to use their own standards in grading the essay. Since all twenty-three faculty in the department graded some of the examinations, the expectation was that the difference between harder and easier graders would balance out over time, in this case the three year period of the examination. This assumption proved to be true as there were no significant differences in the mean scores of any of the subsets of exams graded by any individual faculty member.

The data suggest that students did make gains from their freshman to their senior year on the dimensions of subject matter knowledge and written analytic skills. The data provided are on majors in political science only. The conclusions were not surprising though the slight difference between freshmen and seniors was surprising. Table 2 shows the freshmen to senior changes in learning and cognitive development. The format of the table is adapted from Pascarella and Terenzini (1991).

TABLE 2: Summary of Estimated Freshmen to Senior Changes In Learning and Development

Outcome	Effect size
Subject matter knowledge	1.60
Written analytic skills	1.48

Effect size = (senior mean minus freshman mean) divided by freshman standard deviation

It was certainly pleasing to observe that students did improve over their collegiate career. While the trend is in the positive direction, however, optimism was shortlived. Observing the small gains between the freshman and senior years led the department to conclude that students either are not learning or remembering a lot of information. Further examination of the questions by subfield revealed that scores for seniors were highest in the subfields where the department had required courses for all majors: American politics and Methodology. This led to the obvious conclusion that restructuring of the political science major was necessary. Additionally, the papers submitted for the portfolios did not demonstrate a level of sophistication as analytic and advanced as the department had desired. It was time for a change.

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Using the results of the assessment examination, then, as a point of departure, the Department of Political Science began a fundamental re-examination of its major. After multiple faculty meetings, the department radically changed its major by requiring all majors to take an introductory course in each of the subfields of the discipline. The expectation here is that with more requirements, there should be a higher gain in knowledge. The department realized that a scattering of courses, which allowed the greatest degree of flexibility to students, did not guarantee a coherent overview of the discipline. Students were not being given all of the fundamentals which the department sought as goals. The new curriculum will not begin until the 1997 academic year though it is clear that the assessment process has helped the department to reconceptualize its focus and provide a more coherent major to the students.

CONCLUSION

As Marchese (1985) stated, assessment is with us and it is here to stay. There is no doubt that there will be an increase in the variety of assessment techniques available but it is obvious some means of assessment will be used to evaluate the worth of a collegiate education. It is also obvious that assessment can be a valuable tool in pinpointing weaknesses in programs that may have been discovered earlier only with anecdotal evidence. Programs can change and become more responsive not only to their clientele base, students, but also to society at large. It is time that faculty step out of their ivory towers and change with the environments around them. It is just too easy to accept the status quo and fight against change but sometimes, change is the only solution to an ever-growing problem. Just perhaps our majors are irrelevant in today's world and it is time for a change! And if assessment

points out the strengths in our programs, it is time to move on and build upon those strengths. Assessment is nothing more than a tool to help all departments strengthen their programs!

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